

Amendments to the Claims:

Claim 17 has been amended. Claim 24 has been canceled. The following listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Claims 1 to 16 (canceled).

Claim 17 (currently amended): A machine comprising:

a device for automatically detecting at least one fluorescing and/or light-absorbing indicator contained in a liquid service fluid during a process of filling the service fluid into the machine, the device including a filler tube for the service fluid, the service fluid to be poured in reaching a service fluid supply of the machine through the filler tube, and further including a measurement section made of a translucent material, the measurement section at least partially filled with or traversed by a flow of the service fluid when filling the service fluid into the filler tube, the device further including at least one light source radiating onto the measurement section and an opto-receiver onto which the light impinges, the light being transmitted through the service fluid when the service fluid flows through the measurement section and/or emanating from the indicator due to a fluorescent effect, and which generates at least one measurement signal as a function of an intensity of the light impinging on the opto-receiver, the device including an evaluation unit evaluating at least one measurement signal of the opto-receiver; wherein the filler tube leads into the measurement section.

Claim 18 (previously presented): The machine as recited in claim 17 wherein the opto-receiver has at least two light sensors whose frequency regions are distinct from one another, and which each generate one measurement signal.

Claim 19 (previously presented): The machine as recited in claim 17 wherein the light source and the opto-receiver are oriented to the measurement section and are positioned around the same at an angle of 0° to 170°.

Claim 20 (previously presented): The machine as recited in claim 17 wherein, in a direction of flow upstream of the measurement section, the filler tube has a reduced cross-sectional area in the section leading into the measurement section.

Claim 21 (previously presented): The machine as recited in claim 17 wherein the measurement section includes a measuring tube leading directly or indirectly into the service fluid supply of the machine.

Claim 22 (previously presented): The machine as recited in claim 17 wherein a plurality of light sources are provided, which radiate in frequency regions that are distinct from one another.

Claim 23 (previously presented): The machine as recited in claim 22 wherein the light sources are constituted of LEDs and/or of laser diodes having different wavelengths.

Claim 24 (canceled).

Claim 25 (previously presented): The machine as recited in claim 17 wherein the machine is an engine of a vehicle.

Claim 26 (previously presented): The machine as recited in claim 17 wherein the service fluid is lubricating oil, engine oil or hydraulic oil.

Claim 27 (previously presented): A method for automatically detecting at least one fluorescing and/or light-absorbing indicator contained in a liquid service fluid during the process of filling the service fluid into a machine through a device integrated in the machine, the method comprising the following steps:

filling the liquid service fluid to be detected into a filler tube, through which the service fluid arrives in the service fluid supply of the machine, and the liquid service fluid at least partially filling or flowing through a measurement section;

irradiating the liquid service fluid in the measurement section by at least one light source;

intercepting the light transmitted through the service fluid in the measurement section and/or emanating from the indicator contained in the same due to a fluorescent effect, by an

opto-receiver, an intensity of the light being influenced by the at least one indicator or the concentration thereof;

generating at least one measurement signal indicative of the intensity of the light impinging on the opto-receiver; and

evaluating the at least one measurement signal in an evaluation unit and comparing the measurement signal to stored values.

Claim 28 (previously presented): The method as recited in claim 27 wherein the at least one indicator is a fluorescing dye which is excited by the light source in the measurement section to a fluorescent radiation; and the fluorescent radiation constitutes at least one portion of the light intercepted by the opto-receiver.

Claim 29 (previously presented): The method as recited in claim 27 wherein the service fluid contains at least two indicators that are active in different frequency regions; and the indicators are detected by at least two sensors of the opto-receiver that are sensitive in the different frequency regions.

Claim 30 (previously presented): The method as recited in claim 29 wherein concentrations of the indicators.

Claim 31 (previously presented): The method as recited in claim 27 wherein the measurement signal generated by the opto-receiver correlates with a concentration of the at least one indicator in the service fluid.

Claim 32 (previously presented): The method as recited in claim 27 wherein one of the indicators of the service fluid forms a reference indicator on whose basis the opto-receiver generates a reference signal.

Claim 33 (previously presented): The method as recited in claim 32 wherein the evaluation unit evaluates the at least one measurement signal on the basis of a ratio of the intensity of the at least one measurement signal to the intensity of the reference signal.

Claim 34 (previously presented): The method as recited in claim 27 wherein the evaluation unit assigns a quality signal to the at least one measurement signal.

Claim 35 (previously presented): The method as recited in claim 34 wherein the quality signal is used for automatically determining a time for the next service fluid replacement.

Claim 36 (previously presented): The method as recited in claim 27 wherein the machine is an engine of a vehicle.

Claim 37 (previously presented): The method as recited in claim 27 wherein the service fluid is lubricating oil, engine oil or hydraulic oil.